Docket No.: TJONES-001
First Named: Trevor T.M. Jones

CLAIMS

I claim:

1. A vehicle traction mat for aiding in traction of a vehicle drive tire on a surface, such as ice or hard packed snow consisting of:

a sheet of expanded metal of rectangular shape;

said sheet consisting of bonds and strands which define a plurality of openings through said sheet, the strands and bonds providing for traction enhancing projections on opposing surfaces of said sheet; and

said sheet having an open area percentage from about 40% to about 60%.

2. A vehicle traction mat for aiding in traction of a vehicle drive tire on a hard driving surface having a low coefficient of traction consisting of:

a sheet of expanded metal of rectangular shape that is adapted to be wedged between an iced surface and the drive tire along the leading edge of the drive tire, said sheet consisting of strands and bonds which define a plurality of openings through said sheet, the strands and bonds providing for projections on opposing faces of said sheet, the projections on one face for penetrating the driving surface to retain said sheet in a non-sliding relationship with the surface and the projections on the opposite surface for engagement with the tire providing traction thereto.

- 3. The vehicle traction mat of claim 2, wherein the projections on one face of the sheet for penetrating the driving surface compress upon being loaded by the weight of the vehicle on the drive tire and expand into the penetrated driving surface to provide a higher degree of grip between the drive surface the sheet..
- 4. The vehicle traction mat in accordance claim 2, wherein said sheet of expanded metal is constructed from a material that will penetrate ice having a Mohs hardness from about 1.5 to about 3.0.
- 5. The vehicle traction mat of claim 2, wherein the openings are generally diamond shaped, the diamond shaped openings begin characterized by a short way of the diamond (SWD) dimension length and a long way of the diamond dimension (LWD) length,

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wherein the SWD dimensional length is from about 37% to about 50% of the LWD dimensional length.

- 6. The vehicle traction mat in accordance with claim 5, wherein said sheet is cut from a larger sheet of expanded metal by bond shearing so as to provide non-jagged edges, said sheet being is cut so that the longest side of the sheet is parallel to the SWD dimensional lengths of the openings.
- 7. The vehicle traction mat in accordance with claim 2, wherein said sheet of expanded metal has an open area percentage from about 40% to about 60%.
- 8. A vehicle traction mat kit for aiding in traction of a vehicle drive tire on ice comprising in combination:

at least two non-connected and separate sheets of expanded metal of generally rectangular shape, said sheets including strands and bonds defining a plurality of openings through said sheets;

said sheets each having anti-skid projections on opposing surfaces, the projections on one surface for penetrating the ice to retain a said sheet in a non-sliding relationship with the ice and the projections on the opposite surface for engagement with the tire providing traction thereto; and

said sheets each having a different open area percentage.

- 9. The vehicle traction mat kit in accordance with claim 8, wherein said sheets each have a different open area percentage from about 40% to about 60%.
- 10. The vehicle traction mat kit in accordance with claim 8, wherein said sheets are cut from larger sheets of expanded metal by bond shearing so as to provide a sheet having non-jagged edges.
- 11. The vehicle traction mat kit in accordance with claim 8, wherein said sheets are selected for use on ice having a Mohs hardness from about 1.5 to about 3.0.
- 12. The vehicle traction mat kit in accordance with claim 8, wherein the openings are each said sheet are generally diamond shaped, the diamond shaped openings begin characterized by a short way of the diamond (SWD) dimension length and a long way of

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the diamond dimension (LWD) length, wherein the SWD dimensional length is from about 37% to about 50% of the LWD dimensional length.

13. The vehicle traction mat kit in accordance with claim 12, wherein said sheets are cut from a larger sheet of expanded metal by bond shearing so as to provide non-jagged edges, said sheet being is cut so that the longest side of the sheet is parallel to the SWD dimensional lengths of the openings.

14. The vehicle traction mat kit of claim 8, wherein the projections on one face of said sheets for penetrating the driving surface compress upon being loaded by the weight of the vehicle on the drive tire and expand into the penetrated driving surface to provide a higher degree of grip between the drive surface said sheets.